ELSEVIER

Protein Structure & Molecular Enzymology

Vol. 1292, 1996

BBA Biochimica et Biophysica Acta

Cumulative Contents

Information for Contributors vii

Regular papers

Conformation of *Vespa basalis* mastoparan-B in trifluoroethanol-containing aqueous solution
C.-C. Chuang, W.-C. Huang, H.-M. Yu, K.-T. Wang and S.-H. Wu (Taiwan, R.O.C.) 1

Binding and aggregation of human μ-calpain by terbium ion
K.J. Raser, M. Buroker-Kilgore and K.K.W. Wang (USA) 9

In vivo endoproteolytically cleaved phaseolin is stable and accumulates in developing *Phaseolus lunatus* L. seeds
F. Sparvoli, M.G. Daminati, L. Lioi and R. Bollini (Italy) 15

Purification and characterization of folate binding proteins from rat placenta
M. Da Costa and S.P. Rothenberg (USA) 23

Synthesis and structural characterisation of analogues of the potassium channel blocker charybdotoxin
T.R. Dyke, B.M. Duggan, M.W. Pennington, M.E. Byrnes, W.R. Kem and R.S. Norton (Australia, USA) 31

Spectroscopic characterization of nitrosylheme in nitric oxide complexes of ferric and ferrous cytochrome c' from photosynthetic bacteria
T. Yoshimura, S. Fujii, H. Kamada, K. Yamaguchi, S. Suzuki, S. Shidara and S. Takakuwa (Japan) 39

Determination of the structural role of the N-terminal domain of human extracellular superoxide dismutase by use of protein fusions
L.A.E. Tibell, E. Skärfstad and B.-H. Jonsson (Sweden) 47

Acidic amino acid-rich sequences as binding sites of osteonectin to hydroxyapatite crystals
R. Fujisawa, Y. Wada, Y. Nodasaka and Y. Kuboki (Japan) 53

Pressure-induced inactivation of *E. coli* β-galactosidase: influence of pH and temperature
P. Degraeve, P. Delorme and P. Lemay (France) 61

Enhanced susceptibility to transglutaminase reaction of α-lactalbumin in the molten globule state
Y. Matsumura, Y. Chanyongvorakul, Y. Kumazawa, T. Ohtsuka and T. Mori (Japan) 69

Nucleotide binding to tubulin-investigations by nuclear magnetic resonance spectroscopy
S.S. Rai, K. Kuchroo and S.R. Kasturi (India) 77

Engineering the C-terminus of firefly luciferase as an indicator of covalent modification of proteins
J.P. Waud, G.B. Sala-Newby, S.B. Matthews and A.K. Campbell (UK) 89

Electrophoretic pattern of cytosolic pyruvate kinase fractions A and B (type L and M_2) from normal rat liver and Morris hepatoma 7777
M. Gumińska and J. Ignacak (Poland) 99

Structure of the pseudosubstrate recognition site of chicken smooth muscle myosin light chain kinase
J.A. Barden, P. Sehgal and B.E. Kemp (Australia) 106

Transcobalamin from cow milk: isolation and physico-chemical properties
S.N. Fedosov, T.E. Petersen and E. Nexø (Denmark) 113

Δ^6-Desaturase: improved methodology and analysis of the kinetics in a multi-enzyme system
K.M. Ivanetich, J.J. Bradshaw and M.R. Ziman (USA, South Africa) 120

Spectroscopical and functional characterization of the hemoglobin of *Nostoc commune* UTEX 584 (Cyanobacteria)
M.V. Thorsteinsson, D.R. Bevan, R.E. Ebel, R.E. Weber and M. Potts (USA, Denmark) 133

Total reconstitution of active small ribosomal subunits of the extreme halophilic archaeon *Haloferax mediterranei*
M.E. Sánchez, P. Londei and R. Amils (Spain, Italy) 140

Determination of three-dimensional solution structure of waglerin I, a toxin from *Trimeresurus wagleri*, using 2D-NMR and molecular dynamics simulation
L.-C. Chuang, H.-M. Yu, C. Chen, T.-H. Huang, S.-H. Wu and K.-T. Wang (Taiwan) 145

Mouse coproporphyrinogen oxidase is a copper-containing enzyme: expression in *Escherichia coli* and site-directed mutagenesis
H. Kohno, T. Furukawa, R. Tokunaga, S. Taketani and T. Yoshinaga (Japan) 156

Relationship between kinetic properties of γ-glutamyl transpeptidase and the structure of its saccharide moiety
L. Dvořáková, J. Krůšek, F. Šťastný and V. Lisý (Czech Republic) 163

Isolation and structural characterization of recombinant human *neu* differentiation factor expressed in *Escherichia coli*
S. Hara, N. Liu, S.-Y. Meng and H.S. Lu (USA) 168

Evidence for a posttranslational covalent modification of liver glyceraldehyde-3-phosphate dehydrogenase in hibernating jerboa (*Jaculus orientalis*)
A. Soukri, N. Hafid, F. Valverde, M.S. Elkebbaj and A. Serrano (Morocco, Spain) 177

Trypanosoma cruzi phospho*enol*pyruvate carboxykinase (ATP-dependent): transition metal ion requirement for activity and sulfhydryl group reactivity
L.A. Jurado, I. Machín and J.A. Urbina (Venezuela) 188

Properties and stabilization of an extracellular α-glucosidase from the extremely thermophilic archaebacteria *Thermococcus* strain AN1: enzyme activity at 130°C
K. Piller, R.M. Daniel and H.H. Petach (New Zealand) 197

Erratum

Erratum to "Molecular properties of glutamate dehydrogenase from the extreme thermophilic archaebacterium *Sulfolobus solfataricus*" [Biochimica et Biophysica Acta 1251 (1995) 170–176]
A.M. Facchiano, R. Ragone, V. Consalvi, R. Scandurra, M. De Rosa and G. Colonna (Italy) 207

Regular Papers

Thyroid hormone induces a 52 kDa soluble protein in goat testis Leydig cell which stimulates androgen release
N.R. Jana, S. Halder and S. Bhattacharya (India) 209

Molecular characteristics of dimethylnitrosamine induced fibrotic liver collagen
J. George and G. Chandrakasan (India) 215

Residues in *Torpedo californica* acetylcholinesterase necessary for processing to a glycosyl phosphatidylinositol-anchored form
G. Bucht and K. Hjalmarsson (Sweden) 223

New subtilisin-trypsin inhibitors produced by *Streptomyces*: primary structures and their relationship to other proteinase inhibitors from *Streptomyces*
M. Terabe, S. Kojima, S. Taguchi, H. Momose and K.-i. Miura (Japan) 233

Histidine-49 is necessary for the pH-dependent transition between active and inactive states of the bovine F_1-ATPase inhibitor protein
R. Schnizer, G. Van Heeke, D. Amaturo and S.M. Schuster (USA, Switzerland) 241

A membrane-bound protein kinase from rabbit reticulocytes is an active form of multipotential S6 kinase
E.S. Bensen, J.L. Umphress, J.A. Traugh, L.A. Pinna and P.T. Tuazon (USA, Italy) 249

Spectroscopic studies of *myo*-inositol monophosphatase with a novel fluorescent substrate
T. Pineda, M.J. Thorne, M.G. Gore and J.E. Churchich (Spain, UK) 259

Compressibility and specific volume of actin decrease upon G to F transformation
N. Suzuki, Y. Tamura and K. Mihashi (Japan) 265

Characterization of the constituent polypeptides of the extracellular hemoglobin from *Lumbricus terrestris*: heterogeneity and discovery of a new linker chain L4
K. Fushitani, K. Higashiyama, M. Asao and K. Hosokawa (Japan) 273

The formation of a disulfide cross-link between the two subunits demonstrates the dimeric structure of the mitochondrial oxoglutarate carrier
F. Bisaccia, V. Zara, L. Capobianco, V. Iacobazzi, M. Mazzeo and F. Palmieri (Italy) 281

The 30 kDa protein co-purified with chick liver glutathione *S*-transferases is a carbonyl reductase
S.-P. Tsai, L.-Y. Wang, H.-I. Yeh and M.F. Tam (Taiwan, R.O.C.) 289

Purification of active synaptic vesicles from the electric organ of *Torpedo californica* and comparison to reserve vesicles
L.M. Gracz and S.M. Parsons (USA) 293

A study of a series of recombinant fungal laccases and bilirubin oxidase that exhibit significant differences in redox potential, substrate specificity, and stability
F. Xu, W. Shin, S.H. Brown, J.A. Wahleithner, U.M. Sundaram and E.I. Solomon (USA) 303

Evidence for a proprotein intermediate during maturation of Type II antifreeze protein in sea raven, *Hemitripterus americanus*
B.P. Duncker, S.Y. Gauthier and P.L. Davies (Canada) 312

Glutathione *S*-transferase-π is secreted as a monomer into human plasma by platelets and tumor cells
T. Kura, Y. Takahashi, T. Takayama, N. Ban, T. Saito, T. Kuga and Y. Niitsu (Japan) 317

T4 endonuclease V exists in solution as a monomer and binds to target sites as a monomer
K. Atkins Latham, S. Rajendran, J.R. Carmical, J.C. Lee and R.S. Lloyd (USA) 324

Cumulative Contents, Vol. 1292 335

Author Index 338